

POSSIBLE SOLUTIONS

Obviously present procedures will not solve the problems north and south of the Inlet. It is necessary to by pass sand which may enter the inlet around the end of the north jetty. It is also necessary to find a solution to the shadow just south of the inlet where the natural sand transfer occurs around the end of the north jetty but does not reach shore for a distance of 4,000 to 5,000 feet. And it is necessary to eliminate the severe erosion in Manalapan north of the normal accretion fillet just north of the north jetty caused by the inshore sand pump removing sand not only below but west of the normal shore line.

At Boca Raton Inlet a weir at MLW near the end of the jetty allows drifting sand to spill into the inlet channel where it is pumped by a floating dredge to the near south shore. While the north shore line has receded to the weir location, erosion has been greatly reduced in the shadow zone just south of the inlet.

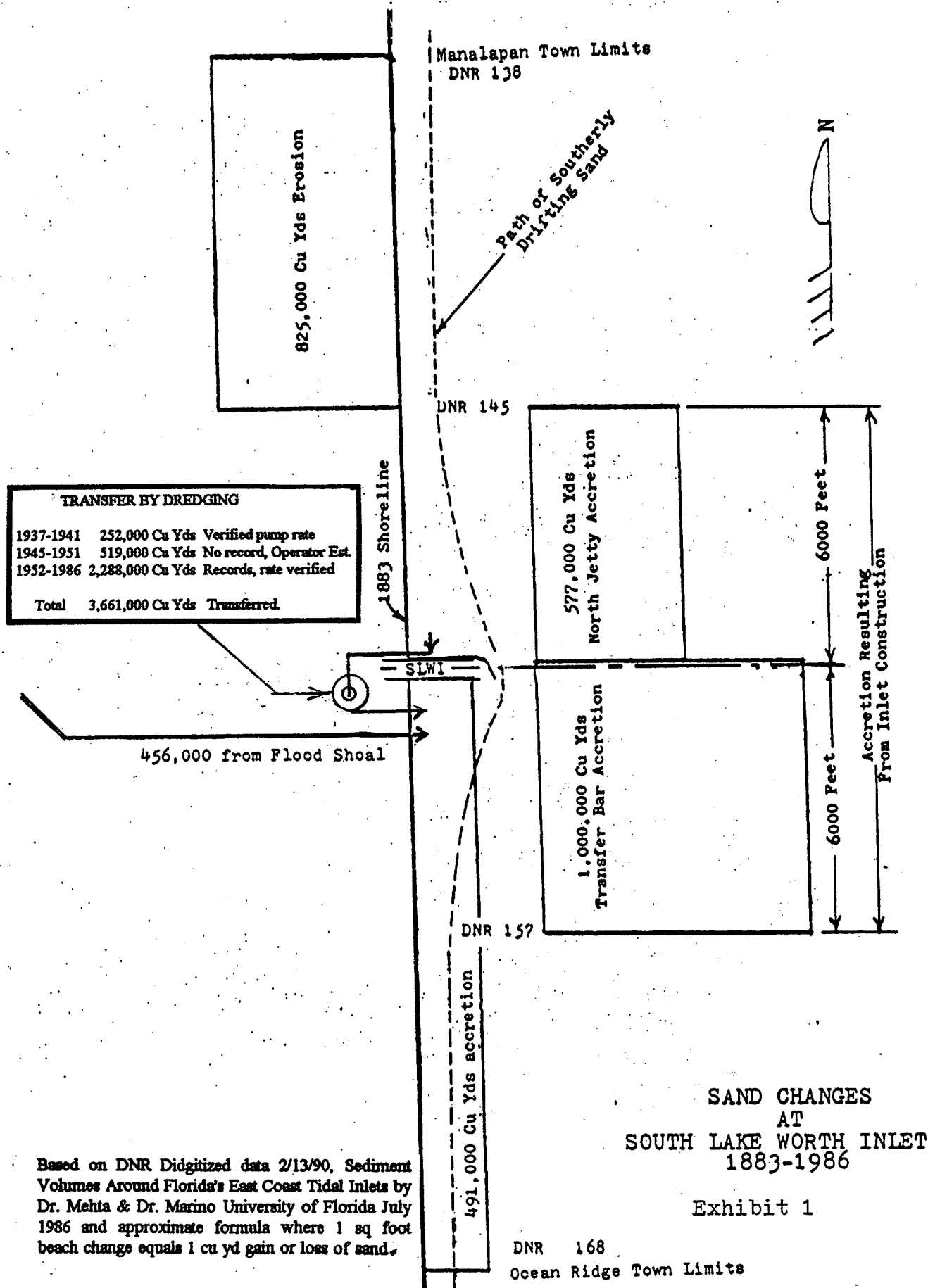
At Hillsboro Inlet a rock formation forms a north jetty quite similar to the SLWI and a natural weir near the end allows sand to spill into pockets near the channel where a small floating dredge transfers the sand accumulation to the immediate south shore. This arrangement also has worked well over the years to reduce the south shore erosion.

Both of these systems have the advantage of picking up not only the small beach drift but also a of the natural drift which occurs just seaward of the end of the north jetty some of which is portion carried behind the end of the jetty in heavy seas, a condition that can't occur at SLWI because the pump is located so far landward from the end of the jetty. Also both systems have some north shore damage but nothing like that at Manalapan.

SUGGESTED MODIFICATIONS

1. Complete the south jetty This will reduce the strong currents that run along the south shoreline and scour the beach area, and may improve the flood currents somewhat to reduce the loss of northerly drift to Manalapan.
2. Construct an underwater breakwater from a point on the south jetty south about 1000'. This will form a perched beach to stabilize and hold sand in the area built out in the ocean, or alternate works to prevent the unusual loss of sand in this area.
3. Construct a steel bulkhead at MLW inside the north jetty forming a retention basin in the outer end of the jetty and remove the rocks in the outer 50' of the jetty to MLW. Exhibit 4.
4. Remove the present pump suction and connect to two or three jet pumps in the basin at 3.
5. Perform the present County plan for beach restoration.
6. Provide a small dredge to frequently pump out the flood basin inside the inlet.

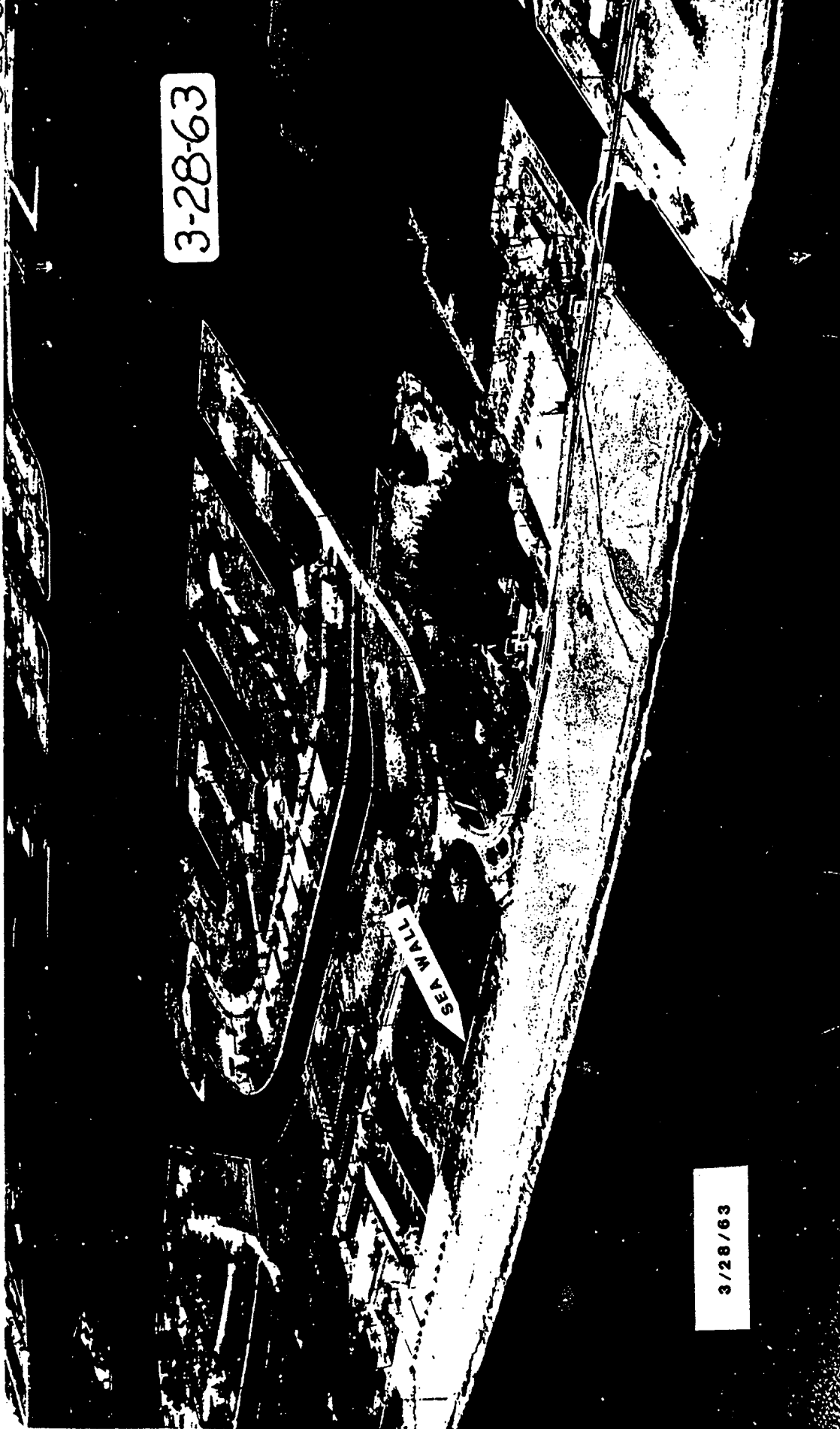
This arrangement will give access to a larger amount of the normal drift passing around the end of the north jetty and plus frequent pumping of the flood shoal inside the inlet should then supply sufficient sand to keep a beach in the protected south shore area. The guarded pump operation will do far less damage to the Manalapan beaches and it is hoped that some of the normal north drift will get by the inlet where it is now denied to Manalapan.





3-28-63

3-28-63



3/28/63

**ENGINEERING APPLICATION
GENERALIZED MODEL FOR SIMULATING SHORELINE CHANGE
CANAVERAL HARBOR, FLORIDA**

**Ed Hodgens, P.E.
U.S. Army Corps of Engineers
Jacksonville District**

ABSTRACT

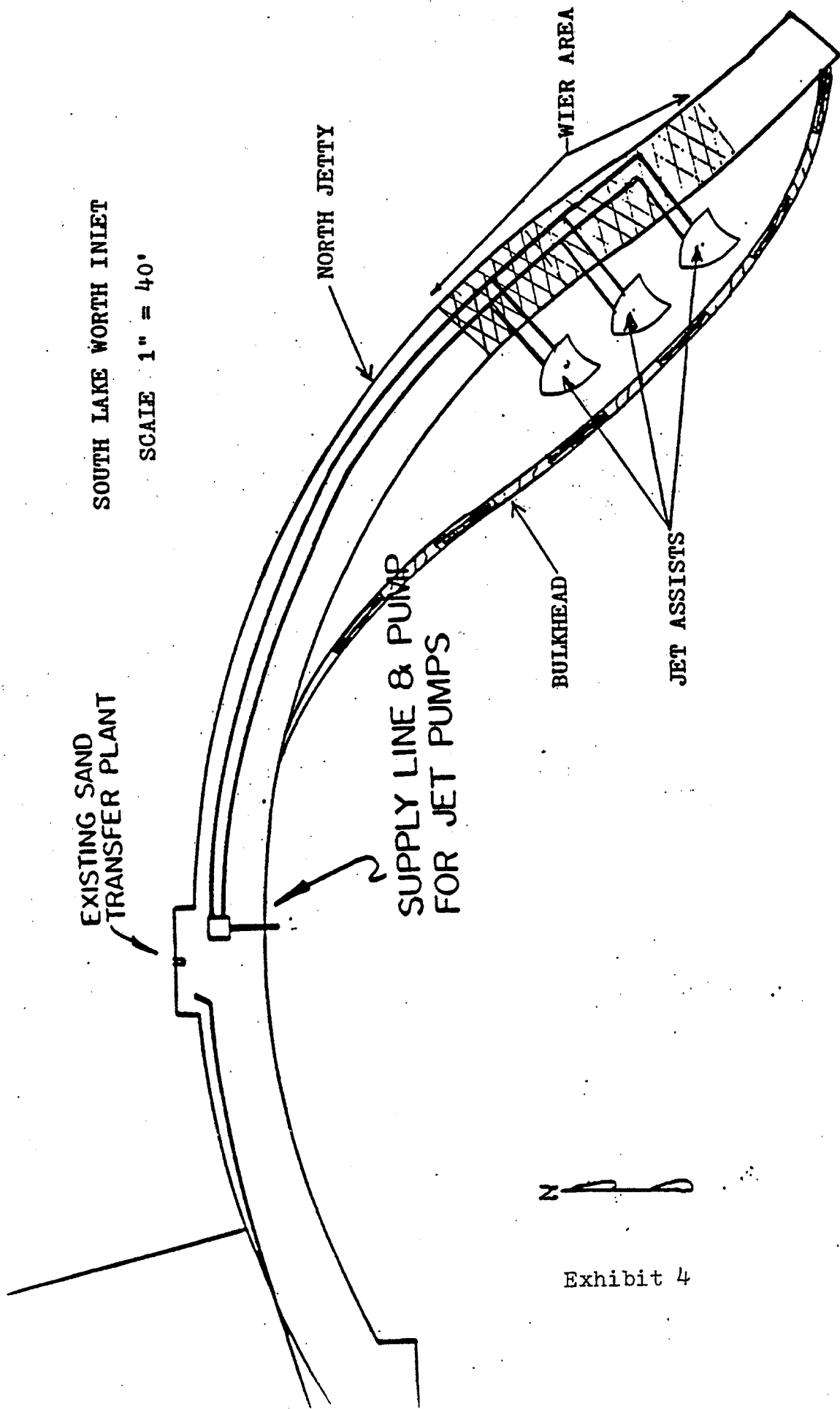
This paper focuses on the use of the computer model GENESIS (Generalized model for Simulating Shoreline change) for evaluation of coastal processes in a highly active area of shoreline where little hard physical field data is available.

Coastal inlets have historically contributed to shoreline erosion and the navigation channel at Canaveral Harbor, Florida, may be responsible for a significant portion of the erosion of the beaches south of the inlet. In 1962, Congress authorized the construction of a sand bypass system to transfer littoral material around the harbor to mitigate erosion losses and reduce navigation maintenance.

A General Design Memorandum (GDM) was prepared in 1989 to address the mitigation of the effects of the port on down-drift erosion. The recommended plan included the construction of a fixed shore-based sand bypass system located north of the north jetty with the capability to bypass 106,000 cubic yards to the south beaches annually. Detailed design was subsequently initiated to determine the most effective location for the bypass system. However, there is extremely limited data upon which to base a detailed coastal engineering analysis of the anticipated sediment budgets by location. Also, the cape and offshore shoals create complex wave patterns along the immediate coast which makes simplified long, sandy coast evaluations inaccurate. It was decided to model the shoreline response to bypassing by using the GENESIS numerical model.

Initial modeling indicated that the recommended GDM plan would have adverse impacts on the beaches north of the inlet. The model was then used to evaluate two alternative methods of bypassing which included a movable shore-based jet pump system and conventional dredging of a nearshore borrow area.

Presented 2-11-93 at the Florida Shore and Beach Convention at St. Petersburg, Florida.



SOUTH LAKE WORTH INLET

SCALE 1" = 40'

NORTH JETTY

WIER AREA

EXISTING SAND
TRANSFER PLANT

SUPPLY LINE & PUMP
FOR JET PUMPS

BULKHEAD

JET ASSISTS

SOUTH JETTY EXTENSION

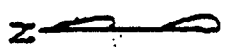


Exhibit 4



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, Florida 33702

December 7, 1994

Colonel Terry Rice
District Engineer, Jacksonville District
Department of the Army, Corps of Engineers
ATTN: Planning Division
Environmental Branch
P.O. Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Rice:

The National Marine Fisheries Service has reviewed your staff's letter dated November 8, 1994, requesting information to help define issues and concerns to be addressed in a Draft Environmental Impact Statement (DEIS) for Region III of the Coast of Florida Erosion and Storm Effects Study.

Your list of alternatives being considered that will be addressed in the DEIS appear complete and we have no further suggestions. The DEIS should address possible impacts to living marine resources that may result from each of the alternatives and any mitigation options that may be available. We do request that seagrasses be included under your significant issues of concern list. Historic renourishment projects, particularly in Dade County, have impacted nearshore seagrass habitats and any future ones could as well.

We appreciate the opportunity to provide these comments. Please continue to coordinate with us as the DEIS becomes available. If you have any questions, please contact Mr. John Iliff of our Miami Field Office at 305/595-8352.

Sincerely,

for Andreas Mager, Jr.
Assistant Regional Director
Habitat Conservation Division

cc:
F/SE02
F/SE023-MIAMI





TOWN OF SURFSIDE

MUNICIPAL BUILDING
9293 HARDING AVENUE
SURFSIDE, FLORIDA 33154
(305) 861-4863

December 6, 1994

Department Of The Army
Jacksonville District
Corps of Engineers
Planning Division, Environmental Branch
P. O. Box 4970
Jacksonville, FL 32232-0019

Dear Sirs,

This letter is to respond to your request for comments with regards to the Coast of Florida Erosion and Storm Effects Study.

The Town of Surfside is very interested in this study since our beach erodes more severely than most. Because of this we urge the following:

1. The continued renourishment of existing projects unless a way is determined to halt the erosion of our beach.
2. The development of methods to retard or halt the erosion of sand from our beach.
3. Until there is no further need for renourishment, the use of Bahamian aragonite for this renourishment.


This last item is most imperative in light of how long the permitting process for renourishment with domestic sand currently takes. We feel that by using sand from the Bahamas, the length of time between funding and renourishment can be drastically reduced. In addition, extensive use of this source of sand may reduce the cost of barging it from the Bahamas to Florida, making it a financially attractive source of sand as well.

No matter the source of sand, a complete beachfront is essential on two fronts. First, a wide beachfront is a strong buffer against water damage from storms. A State of Florida, Division of Beaches and Shores 1987 study concluded that the wider the beach, the lower the storm damage. As was proved during Hurricane Andrew, a full beachfront and the dune system can protect the lives and property of Town residents.

Second, a full beachfront is necessary for the reproduction of sea turtles. Renourishing the beach gives additional space for sea turtle nesting and means less likelihood of baby turtles turning to the lights in the west rather than the water in the east. Renourishment of the beaches in Broward County has apparantly led to increased nesting activity on those beaches.

We hope that our concerns will be addressed in your Draft Environmental Impact Statement for Region III.

Sincerely,

A handwritten signature in dark ink, appearing to read "Hal Cohen", written over a horizontal line.

Hal Cohen
Town Manager

cc: Mayor Paul D. Novack
Senator Bob Graham
Congressman E. Clay Shaw

City of Boca Raton

CITY HALL • 201 WEST PALMETTO PARK ROAD • BOCA RATON, FLORIDA 33432-3795 • PHONE: (407) 393-7700
(FOR HEARING IMPAIRED) TDD: (407) 367-7046
SUNCOM: (407) 922-7700



December 1, 1994

Mr. A.J. Salem
Chief, Planning Division
Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

Dear Ed:

This is to acknowledge receipt of your letter of November 8, 1994 concerning the "Coast of Florida Erosion and Storm Effects Study".

As you know, the City of Boca Raton completed a successful beach nourishment project in 1988 in northern Boca Raton for a length of 1.45 miles with funding participation from the Federal and State governments. Post monitoring studies of this project are on file with the DEP in Tallahassee which may be of assistance.

The City is beginning the engineering process for the renourishment of this project projected for construction in 1995/96 depending on the permitting process.

When this project advances through the governmental review process and as your study progresses, if there are any alternatives or suggestions that will enhance the success of this proposed renourishment we would be more than happy to discuss them with you.

It was nice seeing you again at the annual FSBPA meeting this year and I look forward to working with you in the future.

Sincerely,

A handwritten signature in cursive script that reads "Ron".

Ronald G. Laccheo
Municipal Services Director

c: D. Dreska
K. Mitchell
B. DiChristopher

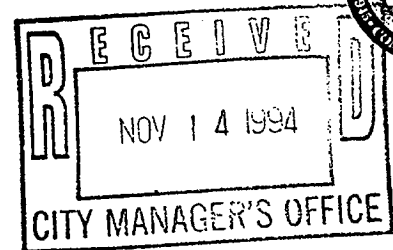
MS/RGL/sb/wp941202



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019
November 8, 1994



REPLY TO
ATTENTION OF
Planning Division
Environmental Branch



TO ADDRESSEES ON THE ATTACHED LIST:

The Jacksonville District, U.S. Army Corps of Engineers, is gathering information to help define issues and concerns that will be addressed in a Draft Environmental Impact Statement for Region III of the Coast of Florida Erosion and Storm Effects Study.

The Coast of Florida Erosion and Storm Effects Study was authorized on 16 July 1984, by Section 104 of the 1985 Appropriations Act (Public Law 98-360). The study is a cooperative effort between the Corps of Engineers and the Florida Department of Environmental Protection, the study sponsor, to investigate coastal processes on a regional basis for the purpose of recommending modifications for existing shore protection and navigation projects.

The study area includes most of the Atlantic and Gulf coast of Florida and has been divided into five coastal regions. The region currently being studied, and is the focus of the DEIS, is Region III which consists of 92 miles of Atlantic Ocean coastline within Palm Beach, Broward, and Dade counties. Refer to the enclosed location map (figure 1). Several alternatives are being considered in the study and will be addressed in the DEIS. These include: 1) continued renourishment of existing projects, 2) design modifications to existing projects where needed, 3) sand bypassing at inlets using sand transfer plants and/or conventional dredging, 4) nearshore placement of suitable maintenance dredged material to feed adjacent beaches, 5) use of suitable maintenance dredged material as beach fill, 6) construction of groins and/or offshore breakwaters, 7) dune construction, 8) construction of sand traps at inlets to aid in sand bypassing, and 9) sand tightening existing jetties to where the need has been identified. Sources of sand that have been identified include offshore borrow areas, upland sand sources, suitable material from maintenance dredging and the possible use of Bahamian aragonite. Significant issues that are anticipated include concern for nearshore and offshore hard bottom communities, fisheries, water quality, and threatened and endangered species.

CITY OF MIAMI BEACH

CITY HALL 1700 CONVENTION CENTER DRIVE MIAMI BEACH FLORIDA 33139



OFFICE OF THE CITY MANAGER

November 28, 1994

TELEPHONE: (305) 673-7010

FAX: (305) 673-7782

A. J. Salem
Chief, Planning Division
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Dear Mr. Salem:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for Region III of the Coast of Florida Erosion and Storm Effects Study. The City of Miami Beach has suffered severe erosion due to Hurricane Andrew, the infamous March 1994 storm, and most recently, Tropical Storm/Hurricane Gordon. The initial renourishment project of the U.S. Army Corps of Engineers, over ten years ago, has provided substantial protection and peace of mind for the 92,000 citizens of Miami Beach, and has created one of the best beaches in South Florida. As storms continue to erode this protection, the City is concerned that the Army Corps take whatever measures necessary to maintain this level of protection.

The Environmental Impact Statement should strongly consider and recommend protective measures that save lives, property and promote the region's #1 economic activity - tourism. Please keep our City informed of any draft documents. We look forward to continued review.

Sincerely,

Roger M. Carlton
City Manager

RMC:jph

cc: Harry S. Mavrogenes, Assistant City Manager
Joe Pinon, Assistant City Manager
Vincent Akhimie, Public Works Director



Town of South Palm Beach

3577 SOUTH OCEAN BOULEVARD
SOUTH PALM BEACH, FLORIDA 33480
(407) 588-8889 • Fax: (407) 588-6632

MARGOT M. ROBERTS - MAYOR
BEVERLY SAVIN - VICE MAYOR

COMMISSIONERS
MAURICE J. JACOBSON
ARTHUR LAVENHAR
ERNEST MURO

November 22, 1994

A. J. Salem
Chief, Planning Division
Jacksonville District
Corps. of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Re: Your letter of November 8, 1994

Dear Mr. Salem:

This is in response to your letter of November 8, 1994, requesting views, comments and information having a bearing on the study objectives of the Environmental Impact Statement now under preparation for Region III of the Coast of Florida Erosion and Storm Effects Study. The information furnished herein is limited to the area of South Palm Beach.

In 1987, the Florida Department of Natural Resources (DNR) prepared a Beach Restoration Management Plan for Palm Beach County. It included a Palm Beach/South Palm Beach Shore Protection Project extending four miles from Phipps Ocean Park to Lantana Public Beach. The Department indicated that it will hold this project in a pending status until the necessary sand source investigation and a study of the marine offshore habitat are completed.

In 1993, the Palm Beach Department of Environmental Resources Management (DERM) submitted to DNR the Environmental Assessment Report for this project area. Some of the conclusions are listed below:

The largest amount of nearshore hardbottom was found in the south end of the survey area between R-132 and the south limit. In this area the hardbottom consisted of at least two bands: a narrow band beginning just below MHW and extending up to 100 feet offshore and a more extensive platform located generally 200 and 500 feet offshore.

The beaches in study area are widest in the north end and become narrow in the south end in South Palm Beach.

A potential borrow area has not been identified. The limited amount of data available on the offshore sediments

in the study area indicates a relatively small grain size of 0.22 mm and 0.42 percentage of silts and clays. The mean grain size of native beach and nearshore sediments in the study area is about 0.38 mm and less than 0.55% silts and clays.

Offshore reefs run throughout the study area beginning 3500 feet to 4000 feet from shore. These reefs are expected to be similar to reefs off Palm Beach Midtown and Ocean Ridge.

A beach nourishment project based on the State project will have much negative impacts to the nearshore hard-bottom system and will impact at least 14.6 acres of nearshore hardbottom. The State project would most likely not be permitted by federal, state and local regulatory agencies. Even if it was permitted, mitigation costs could run up to \$5.1 million.

Some of the recommendations in the Environmental Assessment Report are listed below:

A feasibility study should be performed to update prior studies and to address new or experimental technologies. The study should consider the results of this environmental assessment when evaluating shoreline protection options.

Dunes should be restored where they have been destroyed or degraded and where there is a sufficiently wide beach to ensure a successful dune restoration project.

In January 1994, DERM issued its Geotechnical Report of an Offshore Sand Search for Palm Beach/South Palm Beach Project. The conclusion was that average composite mean grain size is 18 mm, indicating that this deposit is probably too fine to be usable for beach fill material. It recommended that consideration be given to large sediment deposits offshore of Ocean Ridge as an alternative sand source for beach nourishment, using hopper dredge technology. The mean grain size of that offshore material is 0.32 mm.

In a letter dated September 26, 1994 the new Department of Environmental Protection (DEP), which replaced DNR, informed DERM that FY 1995-96 funding for the Palm Beach/South Palm Beach Project was not approved and will not be recommended for the following reasons:

- A. Only that stretch of beach between DNR Range Monuments R-133 and R-137 has been designated as critically eroding by the Florida Department of Environmental Protection. The remainder of the proposed 4.1 mile restoration project is not experiencing critical erosion, thus, does not qualify for state funding for beach restoration.

- B. The Department does not consider the area between DNR Range Monument R-133 and R-137, appropriate for beach restoration due to the extent of historically established marine habitat existing in the nearshore that would be severely impacted or destroyed by such a project. This determination was made by both Palm Beach County's Department of Environmental Resource Management, and the staff of the Florida Department of Environmental Protection.

The Department feels that, because of the critically eroding nature of the southern portion of the proposed project (R-133 through R-137), an investigation should be made to determine what erosion control measures can be taken to address that condition.

On October 27, 1994, a meeting was held between County Commissioner Mary McCarty and representatives of DERM and the Towns of Manalapan, Lantana, South Palm Beach and Palm Beach, to discuss dune restoration for South Palm Beach. It was agreed that this Town can be included in a dune project for Lantana Public Beach, provided it does not jeopardize the Lantana project and the Palm Beach Soil and Water Conservation District has no objection. The DERM staff indicated that they will try to do all necessary research for a combined project, in a timely manner, for the 1995/96 Budget. At a meeting of the Palm Beach Soil and Water Conservation District on November 17, 1994, the District approved the combined project, with the condition that it does not jeopardize the original Lantana dune project. It has been determined by DERM Staff that only 615 feet of the South Palm Beach shore is suitable for dune restoration. The remaining 2,185 feet of the Town's shore is fronted by seawalls too close to the water's edge. Dune restoration in the latter areas is not suitable because of the high probability of failure.

We certainly welcome the recent opportunity which became available to have dune restoration, where feasible. This, however, does not solve the problem of our critical erosion in the rest of the Town. As indicated above, DEP suggests that an investigation should be made to determine what measure can be taken to address the critically eroding nature of our area. On the basis of the information furnished herein, we would appreciate any guidance you give as to how best to approach this matter.

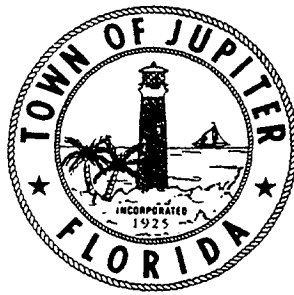
Sincerely,



Sam Gofseyeff, Chairman
Beach Renourishment Council

SG:emc

210 Military Trail
Jupiter, Florida 33458



407/746-5134
FAX 407/575-7785

Town of Jupiter

November 17, 1994

*Planning Division
Environmental Branch
Department of the Army
Jacksonville District Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019*

Dear Gentlemen:

Thank you for informing the Town of Jupiter of the impending Coast of Florida Erosion and Storm Effects Study. At this point, the Town does not have any specific comments to provide; however, we would appreciate being kept informed as to the progress of the study and to receive a copy of the study drafts as they become available.

If there is any particular information that you believe the Town could provide that might be of assistance in the study's preparation, please contact this office at your earliest convenience.

Sincerely,

*Sam Shannon, Director
Department of Community Development*

SS/bj

*cc: Lee R. Evett, Town Manager
Eric Riel, Planning and Zoning Administrator*

City of Miami



CESAR H. ODIO
CITY MANAGER

P. O. BOX 330708
MIAMI, FLORIDA 33233-0708
305-579-6040

A. J. Salem
Chief, Planning Division
Environmental Branch
Department of the Army
Jacksonville District Corps of Engineers
P. O. Box 4970
Jacksonville, FL 32232-0019

RE: Draft Environmental Impact Statement for Region III of the
Coast of Florida Erosion and Storm Effects Study

Dear Sir/Madam:

In response to your request for views, comments and information to help define the issues and concerns to be addressed in your draft Environmental Impact Statement for this region regarding coastal erosion and storm effects, the City of Miami would like to remind you of the present situation at the sole beach under its jurisdiction, Virginia Key Beach.

Virginia Key is a low sandy barrier island, consisting of approximately 1,005 acres of upland area. The shoreline fronting the Atlantic Ocean is approximately 9,000 feet long and includes a sandy public beach. This site has been the subject of previous Corps of Engineers stabilization projects.

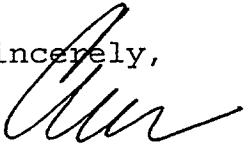
This shoreline continues to suffer from severe erosion due to strong nearshore waves and tidal currents. Several projects have been carried out to try to control the beach erosion including the installation of twenty-seven (27) timber groins, which have since substantially deteriorated, and the construction of thirteen (13) granite groins.

A beach renourishment project has been recommended. Additionally, in conjunction with the renourishment, the construction of a rock revetment along the southern portion of the shoreline has been recommended as an alternative to help curb the effects of erosion. Consequently, we would appreciate your

incorporating the problems being faced at Virginia Key beach as a study objective along with suggesting improvements.

Thank you for your invitation to express our concerns in relation to your study. We hope to receive a copy of your draft once it is published. Please feel free to contact us if you require any additional information.

Sincerely,



Cesar H. Odio
City Manager

cc: Honorable Mayor Stephen P. Clark
Herbert J. Bailey, Asst. City Manager
Carlos F. Smith, Asst. City Manager
Alberto Ruder, Director, Parks and Recreation Dept.



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019
November 8, 1994



REPLY TO
ATTENTION OF
Planning Division
Environmental Branch

TO ADDRESSEES ON THE ATTACHED LIST:

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The study area includes most of the Atlantic and Gulf coast of Florida and has been divided into five coastal regions. The region currently being studied, and is the focus of the DEIS, is Region III which consists of 92 miles of Atlantic Ocean coastline within Palm Beach, Broward, and Dade counties. Refer to the enclosed location map (figure 1). Several alternatives are being considered in the study and will be addressed in the DEIS. These include: 1) continued renourishment of existing projects, 2) design modifications to existing projects where needed, 3) sand bypassing at inlets using sand transfer plants and/or conventional dredging, 4) nearshore placement of suitable maintenance dredged material to feed adjacent beaches, 5) use of suitable maintenance dredged material as beach fill, 6) construction of groins and/or offshore breakwaters, 7) dune construction, 8) construction of sand traps at inlets to aid in sand bypassing, and 9) sand tightening existing jetties to where the need has been identified. Sources of sand that have been identified include offshore borrow areas, upland sand sources, suitable material from maintenance dredging and the possible use of Bahamian aragonite. Significant issues that are anticipated include concern for nearshore and offshore hard bottom communities, fisheries, water quality, and threatened and endangered species.

-2-

We welcome your views, comments and information about resources, study objectives and important features within the described area, as well as any suggested improvements. Letters of comment or inquiry should be sent within 30 days to the letterhead address, attention Planning Division, Environmental Branch.

Sincerely,


F. A. J. Salem
Chief, Planning Division

Enclosures

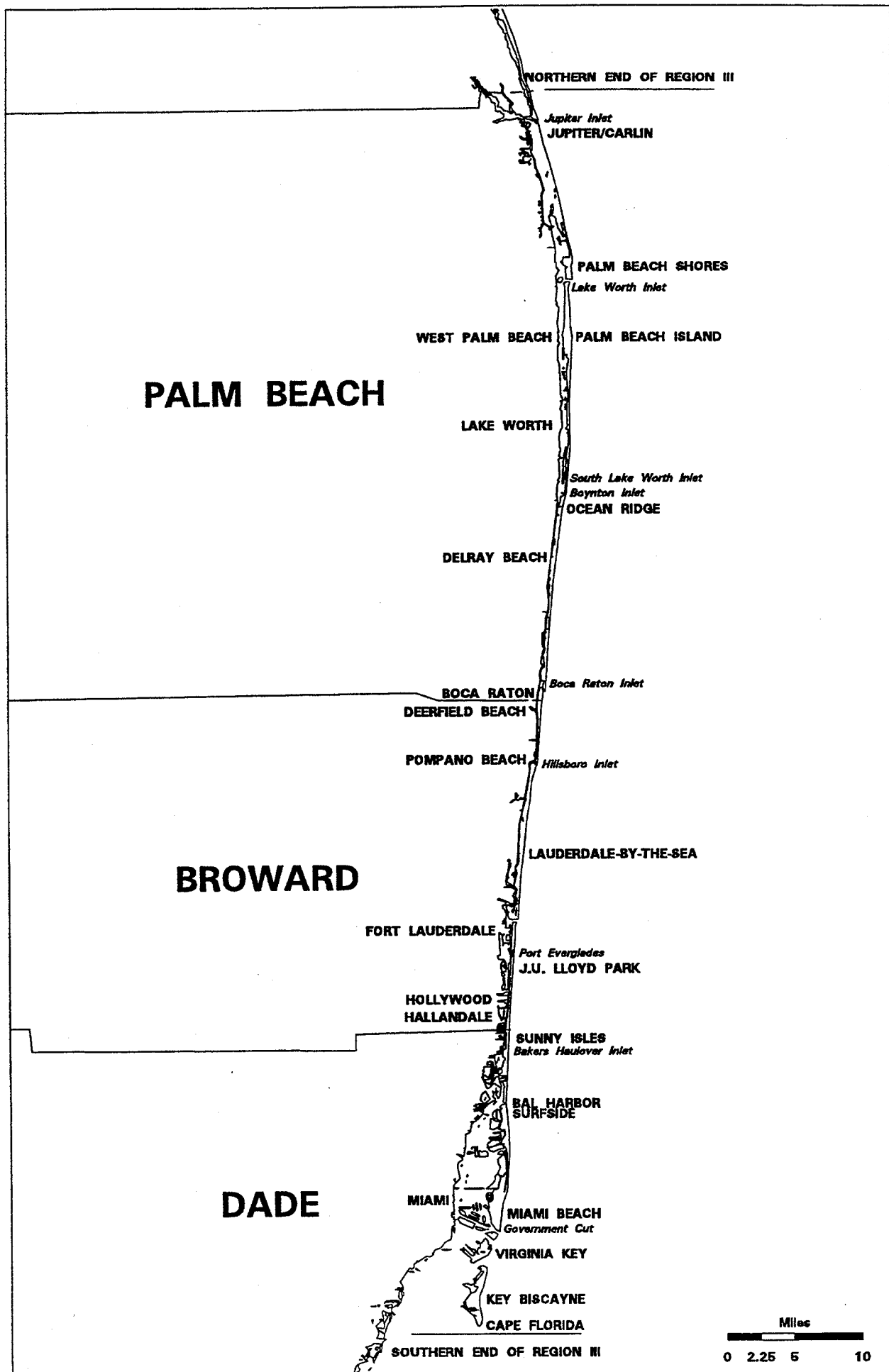


FIGURE 1

LIST OF ADDRESSEES

**COAST OF FLORIDA EROSION AND STORM EFFECTS STUDY
REGION III**

FEDERAL AGENCIES

US DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
401 SE FIRST AVENUE
GAINESVILLE FL 32602-6489

REGIONAL ENVIRONMENTAL OFFICER
HOUSING & URBAN DEVELOPMENT
ROOM 600-C
75 SPRING STREET SW
ATLANTA GA 30303-3309
(2 CYS)

COMMANDER (OAN)
SEVENTH COAST GUARD DISTRICT
909 SE 1ST AVENUE
BRICKNELL PLAZA FEDERAL BLDG
MIAMI FL 33131-3050

REGIONAL DIRECTOR
INSURANCE & MITIGATION DIVISION
FEMA
1371 PEACHTREE STREET NE
ATLANTA GA 30303-3309

SOUTHERN REGION FORESTER
US FOREST SERVICE
DEPARTMENT OF AGRICULTURE
1720 PEACHTREE ROAD NW
ATLANTA GA 30309-2405

REGIONAL DIRECTOR
US FISH AND WILDLIFE SERVICE
75 SPRING STREET SW
ATLANTA GA 30303-3309

FIELD SUPERVISOR
US FISH AND WILDLIFE SERVICE
6620 SOUTHPOINT DR S
SUITE 310
JACKSONVILLE FL 32216-0912

FIELD SUPERVISOR
U S FISH AND WILDLIFE SERVICE
P O BOX 2676
VERO BEACH FL 32961-2676

MR HEINZ MUELLER
ENVIRONMENTAL POLICY SECTION
EPA REGION IV
345 COURTLAND STREET NE
ATLANTA GA 30365-2401
(5 CYS)

NATIONAL MARINE FISHERIES
SERVICE
ENVIRONMENTAL ASSESSMENT BR
3500 DELWOOD BEACH ROAD
PANAMA CITY FL 32407-7499

NATIONAL MARINE FISHERIES SVC
OFFICE OF THE REGIONAL DIRECTOR
9721 EXECUTIVE CENTER DRIVE
ST PETERSBURG FL 33702

NATIONAL MARINE FISHERIES SERVICE
CHIEF, PROTECTED SPECIES BRANCH
9721 EXECUTIVE CENTER DRIVE
ST PETERSBURG FL 33702

STATE AGENCIES

STATE CLEARINGHOUSE
OFFICE OF PLANNING & BUDGETING
EXEC OFC OF THE GOVERNOR
THE CAPITOL
TALLAHASSEE FL 32301-8074
(16 CYS)

MR GEORGE W PERCY DIRECTOR
DIV OF HISTORICAL RESOURCES
STATE HISTORIC PRESERVATION OFF
R A GRAY BUILDING
TALLAHASSEE FL 32399

FLORIDA DEPT OF ENV PROTECTION
OFFICE OF AQUATIC PRESERVES
4842 U S HIGHWAY #1
FORT PIERCE FL 34982

FLORIDA DEPT OF ENV PROTECTION
BUREAU OF STATE LANDS
7400 H SOUTH GEORGIA AVENUE
WEST PALM BEACH FL 33405

FLORIDA DEPT OF ENV PROTECTION
MARINE RESEARCH INSTITUTE
19100 S.E. FEDERAL HIGHWAY
TEQUESTA FL 33469

FLORIDA DEPT OF ENV PROTECTION
SOUTH FLORIDA DISTRICT
1900 SOUTH CONGRESS AVENUE
WEST PALM BEACH FL 33406

FLORIDA DEPT OF ENV PROTECTION
DIVISION OF STATE LANDS
1900 SOUTH CONGRESS AVENUE
WEST PALM BEACH FL 33406

SOUTH FLORIDA WATER MANAGEMENT
DISTRICT
3301 GUN CLUB ROAD
WEST PALM BEACH FL 33416

COUNTY AGENCIES (PALM BEACH CO)

CHAIRPERSON
PALM BEACH COUNTY BOARD OF
COUNTY COMMISSIONERS
301 N OLIVE AVENUE 12TH FLOOR
WEST PALM BEACH FL 33401

PALM BEACH COUNTY ENVIRONMENTAL
RESOURCES MANAGEMENT
3111 S DIXIE HIGHWAY SUITE 146
WEST PALM BEACH FL 33405

PALM BEACH COUNTY PARKS AND
RECREATION
2700 6TH AVENUE SOUTH
LAKE WORTH FL 33461

PALM BEACH COUNTY HEALTH UNIT
ENVIRONMENTAL SCIENCE AND
ENGINEERING
901 EVERNIA STREET
WEST PALM BEACH FL 33401

PALM BEACH COUNTY PLANNING ZONING
AND BUILDING
100 AUSTRALIAN AVENUE
WEST PALM BEACH FL 33406

PALM BEACH COUNTY SOIL AND WATER
CONSERVATION
559 N MILITARY TRAIL
WEST PALM BEACH FL 33415-1311

HISTORICAL SOCIETY OF PALM BEACH
COUNTY
105 S NARCISSUS STREET
WEST PALM BEACH FL 33401

PALM BEACH COUNTY TOURIST
DEVELOPMENT COUNCIL
1555 PALM BEACH LAKES BOULEVARD
SUITE 204
WEST PALM BEACH FL 33401

COUNTY AGENCIES (BROWARD CO)

DR MIRA BARER DIRECTOR
BROWARD CO DEPT OF NATURAL
RESOURCE PROTECTION ADMIN
218 S W FIRST AVENUE
FORT LAUDERDALE FL 33301

B JACK OSTERHOLT
BROWARD COUNTY ADMINISTRATOR
115 S ANDREWS AVENUE ROOM 409
FORT LAUDERDALE FL 33301

ERIC MYERS DIRECTOR
BIOLOGICAL RESOURCES DIVISION
BROWARD CO DEPT OF NATURAL
RESOURCES PROTECTION
218 S W FIRST AVENUE
FORT LAUDERDALE FL 33301

STEPHEN H HIGGINS ASST. DIRECTOR
BIOLOGICAL RESOURCES DIVISION
BROWARD CO DEPT OF NATURAL
RESOURCES PROTECTION
218 S W FIRST AVENUE
FORT LAUDERDALE FL 33301

BROWARD COUNTY PLANNING COUNCIL
ADMINISTRATOR
115 S ANDREWS AVENUE ROOM 307
FORT LAUDERDALE FL 33301-4801

BROWARD COUNTY PLANNING DIVISION
DIRECTOR
115 S ANDREWS AVENUE
FORT LAUDERDALE FL 33301

COMMISSIONER LORI NANCE PARRISH
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COMMISSIONER SCOTT I COWAN
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COMMISSIONER SUZANNE N GUNZBURGER
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COMMISSIONER JOHN P HART
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COMMISSIONER SYLVIA POITIER
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COMMISSIONER JOHN E RODSTROM JR
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COMMISSIONER GERALD THOMPSON
BROWARD COUNTY BOARD OF COUNTY
COMMISSIONERS
115 S ANDREWS AVENUE ROOM 421
FORT LAUDERDALE FL 33301-1872

COUNTY AGENCIES (DADE CO)

MR BRIAN FLYNN
DEPT OF ENVIRONMENTAL RESOURCE MGT
33 S W 2ND AVENUE SUITE 3
MIAMI FL 33130

BOARD OF COUNTY COMMISSIONERS
METROPOLITAN DADE COUNTY
METRO DADE CENTER
111 N W 1ST STREET
MIAMI FL 33128

JEAN EVOY
SENIOR PLANNER
METRO DADE PLANNING DEPARTMENT
STEPHEN P CLARK CENTER SUITE 1210
MIAMI FL 33128

DR CHUCK PEDZOLDT
DIRECTOR
METRO DADE PARK AND RECREATION
DEPARTMENT
50 S W 32 ROAD
MIAMI FL 33129

OTHER AGENCIES

JUPITER INLET DISTRICT
400 N DELAWARE BOULEVARD
JUPITER FL 33458

PORT OF PALM BEACH DISTRICT
BOX 9935
RIVIERA BEACH FL 33404

SOUTH LAKE WORTH INLET DISTRICT
P O BOX 3645
LANTANA FL 33465

FLORIDA INLAND NAVIGATIONAL
DISTRICT
1314 MARCINSKI ROAD
JUPITER FL 33477

TREASURE COAST REGIONAL PLANNING
COUNCIL
P O BOX 1529
PALM CITY FL 33490-1529

CHAIRMAN
HILLSBORO INLET IMPROVEMENT AND
MAINTENANCE DISTRICT
812 NW 6TH AVENUE
FORT LAUDERDALE FL 33311

DIRECTOR
PORT EVERGLADES AUTHORITY
1850 ELLER DRIVE
FORT LAUDERDALE FL 33316

DIRECTOR
PUBLIC REL/COMMUNICATIONS MGR
GREATER FORT LAUDERDALE
CONVENTION AND VISITORS BUREAU
200 E LAS OLAS BLVD SUITE 1500
FORT LAUDERDALE FL 33301

MR STEVE D'OLIVERA
SUN SENTINEL
200 E LAS OLAS BOULEVARD
FORT LAUDERDALE FL 33301-2293

BROWARD REVIEW
EDITOR
P O BOX 114366
FORT LAUDERDALE FL 33302

MIAMI HERALD (BROWARD)
CITY EDITOR
4000 HOLLYWOOD BOULEVARD
SUITE 200
NORTH HOLLYWOOD FL 33021

PALM BEACH POST
EDITOR
P O BOX 24700
WEST PALM BEACH FL 33405-4700

HI-RISER
EDITOR
2000 E OAKLAND PARK BOULEVARD
SUITE 103
FORT LAUDERDALE FL 33306

SOUTH FLORIDA REG PLNG COUNCIL
3440 HOLLYWOOD BLVD SUITE 140
HOLLYWOOD FL 33021

DIRECTOR
PUBLIC WORKS DEPT
CITY OF MIAMI BEACH
1700 CONVENTION CENTER DRIVE
MIAMI BEACH FL 33149

MUNICIPALITIES

MAYOR
CITY OF BOCA RATON
201 W PALMETTO PARK ROAD
BOCA RATON FL 33432

CITY MANAGER
CITY OF BOCA RATON
201 W PALMETTO PARK ROAD
BOCA RATON FL 33432

MAYOR
CITY OF BOYNTON BEACH
100 E BOYNTON BEACH BLVD
BOYNTON BEACH FL 33435

CITY MANAGER
CITY OF BOYNTON BEACH
100 E BOYNTON BEACH BLVD
BOYNTON BEACH FL 33435

MAYOR
TOWN OF BRINY BREEZES
5000 N OCEAN BOULEVARD
BOYNTON BEACH FL 33435

TOWN MANAGER
TOWN OF BRINY BREEZES
5000 N OCEAN BOULEVARD
BOYNTON BEACH FL 33435

MAYOR
CITY OF DELRAY BEACH
100 N W FIRST AVENUE
DELRAY BEACH FL 33444

CITY MANAGER
CITY OF DELRAY BEACH
100 N W FIRST AVENUE
DELRAY BEACH FL 33444

MAYOR
TOWN OF GULF STREAM
100 SEA ROAD
GULF STREAM FL 33483

TOWN MANAGER
TOWN OF GULF STREAM
100 SEA ROAD
GULF STREAM FL 33483

MAYOR
TOWN OF HIGHLAND BEACH
3614 S OCEAN BOULEVARD
HIGHLAND BEACH FL 33487

TOWN MANAGER
TOWN OF HIGHLAND BEACH
3614 S OCEAN BOULEVARD
HIGHLAND BEACH FL 33487

MAYOR
TOWN OF JUNO BEACH
340 OCEAN DRIVE
JUNO BEACH FL 33408

TOWN MANAGER
TOWN OF JUNO BEACH
340 OCEAN DRIVE
JUNO BEACH FL 33408

MAYOR
TOWN OF JUPITER
210 MILITARY TRAIL
JUPITER FL 33458

TOWN MANAGER
TOWN OF JUPITER
210 MILITARY TRAIL
JUPITER FL 33458

MAYOR
TOWN OF JUPITER INLET COLONY
P O BOX 728
JUPITER FL 33468-0728

MAYOR
CITY OF LAKE WORTH
7 N DIXIE HIGHWAY
LAKE WORTH FL 33460

CITY MANAGER
CITY OF LAKE WORTH
7 N DIXIE HIGHWAY
LAKE WORTH FL 33460

MAYOR
TOWN OF LANTANA
500 GREYNOLDS CIRCLE
LANTANA FL 33462

TOWN MANAGER
TOWN OF LANTANA
500 GREYNOLDS CIRCLE
LANTANA FL 33462

MAYOR
TOWN OF MANALAPAN
600 S OCEAN BOULEVARD
MANALAPAN FL 33462-3321

TOWN MANAGER
TOWN OF MANALAPAN
600 S OCEAN BOULEVARD
MANALAPAN FL 33462-3321

MAYOR
VILLAGE OF NORTH PALM BEACH
501 FEDERAL HIGHWAY
NORTH PALM BEACH FL 33408

VILLAGE MANAGER
VILLAGE OF NORTH PALM BEACH
501 FEDERAL HIGHWAY
NORTH PALM BEACH FL 33408

MAYOR
TOWN OF OCEAN RIDGE
6450 N OCEAN BOULEVARD
OCEAN RIDGE FL 33435

TOWN MANAGER
TOWN OF OCEAN RIDGE
6450 N OCEAN BOULEVARD
OCEAN RIDGE FL 33435

MAYOR
TOWN OF PALM BEACH
P O BOX 2029
PALM BEACH FL 33480

TOWN MANAGER
TOWN OF PALM BEACH
P O BOX 2029
PALM BEACH FL 33480

MAYOR
TOWN OF PALM BEACH SHORES
247 EDWARDS LANE
PALM BEACH SHORES FL 33404

MAYOR
CITY OF RIVIERA BEACH
600 W BLUE HERON BOULEVARD
RIVIERA BEACH FL 33404

CITY MANAGER
CITY OF RIVIERA BEACH
600 W BLUE HERON BOULEVARD
RIVIERA BEACH FL 33404

MAYOR
TOWN OF SOUTH PALM BEACH
3577 S OCEAN BOULEVARD
SOUTH PALM BEACH FL 33480

TOWN MANAGER
TOWN OF SOUTH PALM BEACH
3577 S OCEAN BOULEVARD
SOUTH PALM BEACH FL 33480

MAYOR
VILLAGE OF TEQUESTA
P O BOX 3273
TEQUESTA FL 33469

VILLAGE MANAGER
VILLAGE OF TEQUESTA
P O BOX 3273
TEQUESTA FL 33469

CITY MANAGER
CITY OF DANIA
CITY HALL
100 W DANIA BEACH BLVD
DANIA FL 33004

MAYOR
CITY OF DANIA
CITY HALL
100 W DANIA BEACH BLVD
DANIA FL 33004

CITY MANAGER
CITY OF DEERFIELD BEACH
CITY HALL
150 N W SECOND AVENUE
DEERFIELD BEACH FL 33441

MAYOR
CITY OF DEERFIELD BEACH
CITY HALL
150 N W SECOND AVENUE
DEERFIELD BEACH FL 33441

CITY MANAGER
CITY OF FORT LAUDERDALE
CITY HALL
P O DRAWER 14250
FORT LAUDERDALE FL 33302

MAYOR
CITY OF FORT LAUDERDALE
CITY HALL
P O DRAWER 14250
FORT LAUDERDALE FL 33302

CITY MANAGER
CITY OF HALLANDALE
CITY HALL
308 S DIXIE HIGHWAY
HALLANDALE FL 33009

MAYOR
CITY OF HALLANDALE
CITY HALL
308 S DIXIE HIGHWAY
HALLANDALE FL 33009

TOWN MANAGER
TOWN OF HILLSBORO BEACH
TOWN HALL
1210 HILLSBORO BEACH
POMPANO BEACH FL 33062

MAYOR
TOWN OF HILLSBORO BEACH
TOWN HALL
1210 HILLSBORO BEACH
POMPANO BEACH FL 33062

CITY MANAGER
CITY OF HOLLYWOOD
CITY HALL
P O BOX 229045
HOLLYWOOD FL 33022-9045

MAYOR
CITY OF HOLLYWOOD
CITY HALL
P O BOX 229045
HOLLYWOOD FL 33022-9045

TOWN MANAGER
TOWN OF LAUDERDALE-BY-THE-SEA
TOWN HALL
4501 OCEAN DRIVE
LAUDERDALE-BY-THE-SEA FL 33308

MAYOR
TOWN OF LAUDERDALE-BY-THE-SEA
TOWN HALL
4501 OCEAN DRIVE
LAUDERDALE-BY-THE-SEA FL 33308

ADMINISTRATIVE ASST TO THE MAYOR
CITY OF LIGHTHOUSE POINT
CITY HALL
P O BOX 5100
LIGHTHOUSE POINT FL 33064

MAYOR
CITY OF LIGHTHOUSE POINT
CITY HALL
P O BOX 5100
LIGHTHOUSE POINT FL 33064

CITY MANAGER
CITY OF OAKLAND PARK
CITY HALL
3650 NE 12TH AVENUE
OAKLAND PARK FL 33334

CITY MANAGER
CITY OF POMPANO BEACH
CITY HALL
100 W ATLANTIC BLVD
P O DRAWER 1300
POMPANO BEACH FL 33061

MAYOR
CITY OF POMPANO BEACH
CITY HALL
100 W ATLANTIC BLVD
P O DRAWER 1300
POMPANO BEACH FL 33061

CITY MANAGER
CITY OF MIAMI BEACH
TOWN HALL
1700 CONVENTION HALL CENTER
MIAMI BEACH FL 33139

MAYOR
CITY OF MIAMI BEACH
1700 CONVENTION CENTER DRIVE
MIAMI BEACH FL 33139

CITY MANAGER
CITY HALL
6130 SUNSET DRIVE
SOUTH MIAMI FL 33143

MAYOR
CITY OF SOUTH MIAMI
6130 SUNSET DRIVE
SOUTH MIAMI FL 33143

CITY MANAGER
CITY OF MIAMI
CITY HALL
3500 PAN AMERICAN DR
MIAMI FL 33133

CITY MANAGER
CITY OF NORTH MIAMI BEACH
CITY HALL
17011 NE 19 AVENUE
NORTH MIAMI BEACH FL 33162

CITY MANAGER
CITY OF KEY BISCAYNE
85 WEST MACINTYRE STREET
KEY BISCAYNE FL 33149

MAYOR
CITY OF NORTH MIAMI
776 N E 125 STREET
NORTH MIAMI FL 33161

MAYOR
INDIAN CREEK VILLAGE
50 INDIAN CREEK ISLAND
INDIAN CREEK VILLAGE FL 33154

MAYOR
CITY OF MIAMI SHORES
10050 N E 2 AVENUE
MIAMI SHORES FL 33138

MAYOR
NORTH BAY VILLAGE
7903 EAST DRIVE
NORTH BAY VILLAGE FL 33141

MAYOR
CITY OF MIAMI
3500 PAN AMERICAN DRIVE
MIAMI FL 33133

MAYOR
CITY OF WEST MIAMI
901 S W 62 AVENUE
WEST MIAMI FL 33144

MAYOR
VILLAGE OF KEY BISCAYNE
85 WEST MACINTYRE STREET
KEY BISCAYNE FL 33149

MAYOR
TOWN OF GOLDEN BEACH
ONE GOLDEN BEACH DR
GOLDEN BEACH FL 33160

TOWN MANAGER
TOWN OF GOLDEN BEACH
TOWN HALL
ONE GOLDEN BEACH DRIVE
GOLDEN BEACH FL 33160

TOWN MANAGER
TOWN OF SURFSIDE
9293 HARDING AVENUE
SURFSIDE FL 33154

MAYOR
TOWN OF SURFSIDE
9293 HARDING AVENUE
SURFSIDE FL 33154

VILLAGE MANAGER
VILLAGE OF BAL HARBOUR
655 96 STREET
BAL HARBOUR FL 33154

MAYOR
VILLAGE OF BAL HARBOR
655 96 STREET
BAL HARBOR FL 33154

TOWN MANAGER
TOWN OF BAY HARBOR ISLAND
TOWN HALL
9665 BAY HARBOR TERRACE
BAY HARBOR ISLAND FL 331543

MAYOR
TOWN OF BAY HARBOR ISLAND
9655 BAY HARBOR TERRACE
BAY HARBOR ISLAND FL 33154

INTEREST GROUPS

FLORIDA AUDUBON SOCIETY
460 HIGHWAY 436
SUITE 200
CASSELBERRY FL 32707

MR JOHN RAINS JR
ISAAK WALTON LEAGUE OF AMERICA INC
5314 BAY STATE ROAD
PALMETTO FL 33561-9712

FLORIDA WILDLIFE FEDERATION
PO BOX 6870
TALLAHASSEE FL 32314-6870

PROFESSOR JOHN GIFFORD
ROSENSTIEL SCHOOL OF MARINE
AND ATMOSPHERIC SCIENCE
4600 RICKENBACKER CAUSEWAY
MIAMI FL 33149-1098

ENVIRONMENTAL SERVICES INC
8711 PERIMETER PARK BLVD
SUITE 11
JACKSONVILLE FL 32216

CARIBBEAN CONSERVATION CORP
PO BOX 2866
GAINESVILLE FL 32602

JOHN D MACARTHUR STATE PARK
10900 STATE ROAD 703
NORTH PALM BEACH FL 33408

SIERRA CLUB - LOXAHATCHEE GROUP
P O BOX 6271
LAKE WORTH FL 33461

AUDUBON SOCIETY OF THE EVERGLADES
P O BOX 16914
WEST PALM BEACH FL 33416-6914

ROYAL PALM AUDUBON SOCIETY
1300 NW 6TH STREET
BOCA RATON FL 33486

FLORIDA OCEANOGRAPHIC SOCIETY
890 N E OCEAN BOULEVARD
STUART FL 34996

AMERICAN LITTORAL SOCIETY
2809 BIRD AVENUE SUITE 162
MIAMI FL 33133

FLORIDA NATIVE PLANT SOCIETY
7667 PARK LANE
LAKE WORTH FL 33467

FLORIDA MARINE CONSERVATION
CORPORATION
160 ELAINE ROAD
WEST PALM BEACH FL 33413

CENTER FOR MARINE CONSERVATION
ONE BEACH DRIVE S E #304
ST PETERSBURG FL 33701

EASTERN SURFING ASSOCIATION
625 LAKESIDE HARBOUR
BOYNTON BEACH FL

FLORIDA SHORE AND BEACH
PRESERVATION ASSOCIATION (FSBPA)
864 EAST PARK AVENUE
TALLAHASSEE FL 32301

FLORIDA SHORE AND BEACH
PRESERVATION ASSOCIATION
SINGER ISLAND CHAPTER
5200 N OCEAN DRIVE #1006
RIVIERA BEACH FL 33404

JOHN SZELIGOWSKI
TAMS CONSULTANTS
655 3RD AVENUE
NEW YORK NY 10017

MR JOHN FLICKER
THE NATURE CONSERVANCY
2699 LEE ROAD #500
WINTER PARK FL 32789

CHAIRMAN
SIERRA CLUB
P O BOX 430741
MIAMI FL 33142-0741

CONSERVATION CHAIRMAN
SIERRA CLUB
9829 S W 62 COURT
MIAMI FL 33156

CHAIRMAN
AMERICAN LITTORAL SOCIETY
75 VIRGINIA BEACH DR
KEY BISCAYNE FL 33149